DOCUMENT RESUME

ED 424 013 PS 026 983

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TITLE Examining the Permanence of Education in Solving Social Problems.
PUB DATE 1998-09-00
NOTE 23p.; Paper presented at the Annual European Early Childhood Education Research Association (EECERA) Conference (8th, Santiago de Compostela, Spain, September 2-5, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Followup Studies; Foreign Countries; *Instructional Effectiveness; *Interpersonal Competence; Outcomes of Education; Preschool Children; Preschool Education; Pretests Posttests; Problem Solving; Program Effectiveness; *Skill Development
IDENTIFIERS *Long Term Effects

ABSTRACT

This study examined the permanence of the effect of education given to preschool children on solving their social problems. In previous research, 74 children completed pre-tests measuring problem-solving skills and then approximately half participated in a 14-week educational program on social problem-solving. Post-test results indicated an increase in the problem-solving skills of the experimental group. In this study, the post-test was administered again to the children one year later. Although the differences between the two groups of children were significant on the first post-test, they were not significant on this post-test. An increase in scores was found for the control group children, while a significant decrease in test scores was found for the experimental group, resulting in equal scores for both groups. Results suggested that social problem-solving education needs to be continuous. (Includes author abstracts in French and Spanish. Contains 19 references.) (EV)

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# EXAMINING THE PERMANENCE OF EDUCATION IN SOLVING SOCIAL PROBLEMS

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# EXAMINING THE PERMANENCE OF EDUCATION IN SOLVING SOCIAL PROBLEMS

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## SUMMARY

This study was made with the aim of examining the permanence of the effect of education given to preschool children for the solution of their social problems. In this research the post test scores of the children within previous research was compared with the scores which was taken one year later. The previous research was made with 74 children 34 of which were girls and 40 of which were boys. 38 of those constituted the experimental group and the remaining 36 constituted the control group. After giving pre-tests to children that measures the problem solving skills, a problem solving education had been given for 14 weeks which was followed by the application of post tests. As a result, an increase in the problem solving skills of the children was observed. Thereafter, the second research was planned with the aim of noting whether there has been a difference in the problem solving abilities of the control group in the passed one year in order to emphasise the effect of education and the same test was repeated on the same children one year after the post test of the first research.

As the differences between the experimental and control groups in the post test of the previous research (post test 1) were significant ($p<0.05$) , it was observed that the difference between the experimental and control groups in the test made one year later (post test 2) was not significant ($p>0.05$). In case that the education is not continued, an increase, which is by opinion attributable to the age, was observed in the control group whereas a significant decrease was observed in the experimental group ($p<0.05$). Although the resulting data obtained appear to be the identical in both the experimental and control groups, the decrease in the experimental group (the difference between the post test 1 and post test 2) is significant ($p<0.05$). This may be due to the teachers' not being able to continue education after the completion of the study since no instructions were given to the teachers about problem solving skills. If the teachers were given a course or instruction on educating the children about problem solving skills, the education given to the children would be continuous probably causing an increase in the score of children, in other words, these skills would be useable in daily life.

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# Une RÉVISION DE PERMANENCE DE ÉDUCATION DANS RÉSOUDRE des PROBLÈMES SOCIAUX

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## Le RÉSUMÉ

Cette étude a été exécutée pour le but seul de permanence difficile d'éducation qui permet solution facile des problèmes sociaux rencontré par les enfants préscolaires. A l'étude initiale, un nombre total de 74 cinq année vieil enfants a été sélectionné 36 de qui a formé le groupe de l'épreuve pendant que l'en rester 38 a formé le groupe du contrôle. De ce total, 40 étaient garçons et 34 étaient des filles. Suivre l'administration des épreuves préliminaires pour mesurer leur problème qui résout des habiletés, les enfants ont été donnés un problème qui résout éducation qui dure en quatorze jours après quoi les épreuves définitives ont été conduites. A la fin, les enfants ont été trouvés pour montrer une augmentation dans leur problème qui résout des habiletés. Plus tard, une deuxième étude a été organisée déterminer pour le but de mettre en valeur les effets positifs d'éducation, si le problème qui résout habiletés de l'épreuve et groupe du contrôle montrait tout désaccord en ce qui concerne l'un l'autre ou pas, dans une période totale d'une année dans qu'aucun des enfants n'a reçu problème qui résout l'éducation apparentée. La même épreuve a encore été administrée sur le même groupe d'enfants qui suivent une année après l'achèvement de l'épreuve définitive de l'étude initiale. Pendant que la différence entre les résultats prises de l'épreuve et groupes du contrôle pendant la scène difficile définitive de l'étude initiale était considérable ($p < 0.05$), les résultats obtenus de l'épreuve et groupes du contrôle pendant la scène difficile définitive de la deuxième étude ont exécuté suivre une année après l'achèvement du premier on n'a révélé aucune différence considérable parmi les chiffres mesurés pour les deux ($p > 0.05$). De l'autre côté, en dépit du fait que l'éducation n'a plus été continuée avec, une augmentation qui est pensée pour être dû aux enfants vieillit a été observé dans le groupe du contrôle pendant qu'une baisse considérable a été trouvée dans le groupe de l'épreuve ($p < 0.05$). Même si les données avaient obtenu paraît être identique dans représentation numérique pour l'épreuve et groupes du contrôle, la baisse accomplie par le groupe de l'épreuve (à savoir, la différence entre l'épreuve 1 définitive et épreuve 2 définitive) est considérable ($p < 0.05$). Et cela peut être attribué à l'incapacité des professeurs pour avancer continuez avec cette éducation qui suit l'achèvement de la dernière étude dû à pas leur n'être pas soumis à une étude du cours pertinente en apprenant problème qui résout des habiletés. Si les professeurs avaient la participation directe dans le problème qui résout des habiletés éducation apparentée avec les enfants, alors l'éducation reçue par les enfants serait dans une nature permanente et l'amélioration positive dans les habiletés des enfants continuerait sur une base permanente, dans les autres mots, que ces habiletés seraient apportées dans vie comme outils utilisables réellement.

# Una REVISION DE DURABILIDAD DE EDUCACION RESOLVIENDO PROBLEMAS SOCIALES

Ayudante Asociado Profesor de Dr. Çağlayan DINÇER

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**RESUMEN**

Este estudio se realizó para el solo propósito de durabilidad de la comprobación de educación que habilita solución fácil de problemas sociales encontrado por niños del preschool. Al estudio inicial, un número total de 75 niños cinco año viejos se seleccionó 36 de que formó el grupo de la prueba mientras el siguiendo siendo 38 formaron el grupo del mando. De este total, 40 eran que los muchachos y 34 eran muchachas. Siguiendo la administración de pruebas preliminares para medir su problema que resuelve habilidades, los niños se dieron un problema que resuelve educación que dura después de lo cual en catorce días las pruebas finales se dirigió. Al final, los niños fueron encontrados para mostrar un aumento en su problema que resuelve habilidades. Después, con el propósito de resaltar los efectos positivos de educación, un segundo estudio fue planeado determinar si el problema que resuelve habilidades de la prueba y grupos del mando estaba mostrando cualquier diferencia con respecto a nosotros, dentro de un periodo total de un año en el que ninguno de los niños recibió problema que resuelve educación relacionada. La misma prueba se administró de nuevo en el mismo grupo de niños que siguen un año después de la realización de las pruebas finales del estudio inicial. Mientras la diferencia entre los resultados tomados de la prueba y grupos del mando durante la fase de la comprobación final del estudio inicial era significante ($p < 0.05$), los resultados obtenidos de la prueba y grupos del mando durante la fase de la comprobación final del segundo estudio realizaron siguiendo un año después de la realización del primero uno no reveló ninguna diferencia significante entre las figuras medidas para los dos ($p > 0.05$). Por otro lado, a pesar del hecho que la educación ya no se procedió con, se observó un aumento que se piensa que es debido al envejecimiento de niños en el grupo del mando mientras una disminución significante se encontró en el grupo de la prueba ($p < 0.05$). Aun cuando los datos obtuvieron parece ser idéntico en representación numérica para la prueba y grupos del mando, la disminución lograda por el grupo de la prueba (a saber, la diferencia entre la prueba 1 final y la prueba 2 final) es significante ($p < 0.05$). Y esto podría atribuirse a la incapacidad de maestros para llevar más allá procede con esta educación que sigue la realización del último estudio debido a su no sujetarse a un estudio del curso pertinente en problema instrucción que resuelve habilidades. Si los maestros tuvieran envolvimiento directo en el problema que resuelve habilidades la educación relacionada junto con los niños, entonces la educación recibida por los niños estaría en una naturaleza permanente y la mejora positiva en las habilidades de estos niños continuaría en una base permanente, en otras palabras, que estas habilidades realmente se traerían en la vida como herramientas utilizables.

## INTRODUCTION

Human relations that constitute the basis of the social environment have gained an important dimension today. As the requirement of the social life, the interpersonal relations have become denser but this situation has brought many problems with it.

The preschool years are accepted as the years in which the basis of the social development is formed. The thought perspective of the child gets larger in this period of life and his/her cognitive development and feelings develop when in communication and relation with others (Bentzen, 1993).

The skills required when entering a new environment or being introduced to a new person are called as 'social skills'. The social skills are developed for the interaction of the children with each others. This means the cooperation and sharing between the children (Hennessy & Martin, 1992). Furthermore, the social skills emphasize the importance of certain behaviors that are important in the interpersonal relations (Barnett & Zucker, 1990). Social skills are the abilities of getting along well with each others, convincing or affecting the other without getting aggressive, solving the problems with different ways, supporting the social interaction and friendship. Social skills also decrease ego-centrism and increase socio-centrism (Bentzen, 1993).

The children develop their social interaction via two ways. These are interaction with their peers and interaction with adults. The role of the peers increases by time in the preschool years of the children. The relationships with peers have an important and invariant role on the social and cognitive developments of the children. Positive peer relationships are the indicators of positive social development (Asher, 1978, Goffin, 1987). During interaction with their peers, the children also face with some social problems (Greenberg, 1992). But these problems among the peers provide children the chance to note the different feelings, thoughts

and points of view of the others (Goffin, 1987). The positive relationships of the children with parents in the first years and with educators and other adults in the following years have a great importance in the life of the child. With the presence of adults that show affection and be kind to the child and communicate with him/her with emphatic ways, the child learns developing positive relations with others and helping them, listening to other people and sharing something with them, and waiting for his/her turn (Wittmer & Honig, 1994). The interaction between the young children and the adults will change in the environment and atmosphere of the class. While the educators facilitate pro-social behaviors and focusing on such behaviors, the entire environment of the classroom will change. The educators can provide an important help by appreciating the pro-social behaviors such as being kind and respectful, expanding the cooperation behaviors, teaching the children the effect of their behaviors on others and by encouraging them for helping each other (Wittmer & Honig, 1994).

Helping the children in learning to solve their problems must be the most important focus of the preschool education. Taking into consideration that the preschool years are the most sensitive part of the human life and that the skills obtained during this period will leave permanent effects, the importance of the education given to the children during this period becomes apparent. The children needing help and guidance for their relations with their peers and adults need help in solving social problems as well as many other subjects (Lawhon, 1997). The social problems frequently met especially in the classroom environment are good opportunities for the children to learn the social skills. The adults must see the problems of the child as an opportunity for developing their own problem solving skills instead of solving them for their children. This basic approach requires the training of both educators and parents about problem solving. Education including solving social problems provides benefits not only for children but also for the educators and is an effective discipline method for the entire

class. When an educator interfere with quarreling children, his/her learning the reason of the quarrel, easily understanding who is sorry and who is angry is of great importance in terms of positive resulting of the quarrel (Dinwiddie, 1994). The adults in direct communication with children must first place this educational approach in his/her own repertory in order to use it when necessary and to be a good model for the children. Furthermore, the educators must teach the children the social skills such as waiting for turn, listening, offering help, sharing and verbal directions that are necessary for social interaction (Goffin, 1987). Preparing a safe and comfortable environment for the children, allowing them to be a part of the decision-making process, giving time to them for finding solutions for the problems are strategies facilitating the solution of the problems of children (Tegano et al., 1989). All these approaches will help the placement of such behaviors in the character of the child. This education process helping the children arrange their relations with others enlightens the way out for finding solutions for such problems and facilitates understanding the feelings of the people and becoming aware of the reasons and results of the behaviors.

The permanencies of this education that will be helpful in arranging the interpersonal relations with others depend on the systematic use of the education and placement of it in our lives. Being a model, reading books relating to the subject, puppet plays, providing opportunity for role plays, telling stories are some of the techniques that will be helpful for the educators (Crary, 1984). The children that are able to think of the alternatives, living in harmony and developing while noting the reasons and results of the social problems will be able to have easily contact social relations in the real life.

This research has been carried out for examining the permanency of the problem solving education given to children of 5 age group after a one-year period passed without receiving any education.

## METHOD

A group consisting of 6 age children were taken as the subject of this study which is basically intended to examine the permanence of the effect of education given to preschool children for the solution of their social problems. In this research the post test scores of the children within previous research was compared with the scores which was taken one year later. As a result of previous study, an increase in the problem solving skills of the children was observed (Dinçer & Güneysu, 1997) and the second research was made with the aim of noting whether there has been a difference in the problem solving abilities of the same children in the passed one year without taking education. In the study empirical methods were employed as for the collection of data. The previous research was made with 74 children. 38 of those constituted the experimental group and the remaining 36 constituted the control group. After giving pre-tests to children that measures the problem solving skills, a problem solving education had been given for 14 weeks which was followed by the application of post tests. In the second study which was made following a year from the first one, 58 children were included in total, 30 of whom were chosen to form the experimental group while the remaining 28 constituted the control group. Since 16 children left the preschool after the first study, they couldn't be included in this study.

In the pre and post testing stages of the first study and in this study which is one year later from the previous post test, the Preschool Interpersonal Problem Solving Test (PIPS) was employed while the Interpersonal Cognitive Problem Solving Program (ICPS) was used during the training stage of the first study. (Shure, 1992 a, Shure, 1992b, Dinçer & Güneysu, 1997)

The PIPS Test has originally been developed by Myrna B. Shure with the core goal to measure the interpersonal cognitive problem solving skills of preschool children and to

improve in the same, the ability of thinking on some alternative solutions for problems in-kind. The test mainly consists of two parts. In the first part, a set of stories are presented to the children addressing the problems among peers. Each story outlines the fact that a child wants to play with the toy owned by another for the realization of which purpose he is required to figure out and implement some ways of intellect. In the second part, the child's causing damage on a particular item or tool owned by his/her mother representing the authority is brought forth as the argument and the children are called for thinking of ways to prevent the mother get angry thus punish them.

During the training stage, the "I Can Problem Solve (ICPS)" program originally designed again by Myrna B. Shure for the purpose of solving the interpersonal problems of preschool was utilized. The main goal of the program is to teach the children a variety of thinking skills which may help them manage to prevent or solve their own interpersonal problems. The program mainly consists of two parts which may be characterized as Pre- Problem Solving Skills and Problem Solving Skills. The core aim in the first part is to provide teaching for the children so that they can get familiar with the concepts and meanings of the words used in association with problem solving, help them identify their own and others' feelings and emotional attitudes and to seed in them the common attitude to take other people's ideas into account. In the second part, the children were rather intended to think on more than one solutions on a certain problem, taking into account their consequences and to decide on the best solution by simple comparison.

The PIPS Test was directly administered on each child in the sample individually. The main issue in scoring is to identify solutions that are really different and not enumeration of an earlier response, mere repetitions or similar repetitions of an earlier response or responses not relevant to the problem as stated. The solutions raised by each and all the children who were

subjected to the test were evaluated and scored through classification under preset categories and in some cases under some sub-groupings in any particular category. The ICPS Program was introduced to two groups in the experimental group only in the first study. This program required a daily group work with the children for an entire period of four months.

In the statistical analyses of data collected, "The Significance Test For The Difference Between Two Means" was used for Table 1 and 3, "The Significance Test For The Difference Between Two Equals" was used for Table 2 and 4.

**FINDINGS**

This study has been carried out for examining the permanency of the education about solving the social problems and 58 6-age group children have been included in the study, 30 of which were in the experimental group and 28 of which were in the control group.

In case of problem with peer, when the number of solutions given by the children are examined, it is found that the difference between the averages of the points of the experimental and control groups in relation with post test 1 was significant ($p<0.05$), while the difference between the averages of the points of these groups in relation with post test 2 was not significant ($p>0.05$) in accordance with the result of the importance test of the difference between the two means. When the categories used by the children are examined, the difference between the point averages of the experimental and control groups relating to post test 1 are observed to be significant ($p<0.05$) while the difference between the point averages of these groups relating to post test 2 is seen to be non-significant ($p>0.05$). (Table 1) (Figure 1)

When the distribution of the number of solutions given and the number of the categories used by the children for the peer problem case in accordance with the averages points of post test 1

and post test 2 in experimental and control groups is examined, the difference between the post test 1 and post test 2 averages points of the experimental group is found to be significant ($p<0.05$) and the difference between the post test 1 and post test 2 averages points of the control group is found to be non-significant ($p>0.05$) in accordance with the result of the test relating to the importance of the difference between the two equals applied (Table 2)

In case of problem with mother, when the number of solutions given and the number of categories used by the children are examined, it has been found that the difference between averages of the points of the experimental and control groups in relation with post test 1 was significant ($p<0.05$) while the difference between averages of the points of the experimental and control groups in relation with post test 2 was not significant ($p>0.05$) (Table 3) (Figure 2)

In case of problem with mother, when the number of solutions given and the number of categories used by the children are examined, it has been determined that the difference between the post test 1 and post test 2 averages points of the experimental group was not significant ($p>0.05$) and the difference between the post test 1 and post test 2 averages points of the control group was significant ($p<0.05$) (Table 4)

**DISCUSSION AND RESULT**

The significance of the difference between the point averages of the experimental and control groups relating to post test 1 about the problems with peers that is applied just after the problem solving education of fourteen weeks that is given during the study carried out one year ago, both in terms of the solutions produces and in terms of the categories used, shows that the problem solving education is really effective. The parents and the educators also noted that the reflection of these positive results on children's behaviour were observed by them. The difference between the point averages received from post test 2 that is applied after a one-year

period passed without any education is found to be non-significant in terms of the solutions and the categories and this condition shows a decrease in the effect of the problem solving education. In spite that the experimental group caused a significant difference with the solutions it brought and the categories it used for the problems with peers when compared with the control group in post test 1 as the result of the education it received, the difference between the two groups is found to be non-significant although the experimental group obtained a slightly higher point in comparison with the control group in post test 2 (Table 1). In Table 2, it is determined that a significant decrease was existing as the result of the comparison of the points of the experimental group relating to post test 1 and post test 2 about the solutions brought and categories used for the problems with peers. Since the educational stage of the first study has been applied by the researcher, and even many efforts have been made for including the educators in the education process, since the educators responsible for the experimental group did not pass through this education process and could not completely apply the problem solving education, it has been determined that they could not reflect this education neither to their own behaviours nor to the behaviours of the children in the class.

It can be claimed that the interpersonal problem solving education given (ICPS) has caused a significant increase for the experimental group when compared with the control group in relation with the number of solutions brought and the categories used for the case of problem with mother who is accepted as the authority as the result of the post test 1 and it can also be claimed that the skill of the children for finding alternative solutions for this problem case increases in parallel with training. The points of the post test 2 did not give a significant difference between the experimental and control groups in terms of solutions and categories for the problems with mother just as the case for problems with peers. The interpersonal problem solving education given has been limited only with the term of education and since the educators did not have an effective role in this term, they could not continue the education

approach and hence education has lost its permanency in terms of children (Table 3). Holloway and Reichhart have stated that children having better relations with their teachers have given more social answers and used more social categories as the result of their study carried out in 1987 (Holloway & Reichhart, 1987). Since the interpersonal problem solving education is based on effect – response relations, the educated children have reflected this education to their relations with the authority and have shown the effect of the education in case of a problem. The non-significant difference between the points of post test 1 and post test 2 points of the experimental group that is given in Table 4 relating to the solutions brought and categories used in case of problem with mother can be explained as stated hereunder: an increase in the points of the first post test has occurred in relation with the education given. On the other hand, while the effect of the education decreased by time, an increase in the solutions and categories occurred in relation with growth. In the same way, the significant difference seen between the post test 1 and post test 2 results of the control group can be commented as an increase resulting from the growth of children.

The results of the study carried out by Spivack and Shure in 1982 show that the effect of ICPS program on the behavior continues at least for one year, that the children educated twice are significantly better than the children educated once in the PIPS points and that education received for once is better in all conditions than not receiving any education (Shure & Spivack, 1982). As the result of another study it is seen that small children (age-4) reach the necessary maturity for successfully solving their problems (Shure & Ditlow, 1994).

The number of solutions and number of categories used in case of problems with peers being always more than the number of solutions and number of categories used in case of problems with mothers is an important finding. This finding must also be supported with the findings of Patterson (1982). Patterson has also stated that the children in the experimental group showed

better performance about the interpersonal problems relating to peers in comparison with the interpersonal problems relating to authority (Patterson, 1982). Since the samples are taken from the children who spend most of their times in the pre-school, it is normal that children having more opportunities for interrelations with peers, hence facing more problems think of and find more solutions. In the study carried out by Casey in 1990, it is found that the problem solving points of children that are subjected to the program teaching them to find more creative and reasonable solutions for the problems and developing their thinking skills, were much higher than the points of the children going to other kindergartens (Casey, 1990).

As the result, it can be claimed that the education given for facilitating the solution of the social problems will be effective when it is used continuously and when the educators adopt this educational approach and convert it into behavior. For this reason, we recommend all educators interested in the preschool children to pass through this education.

## REFERENCES


ASHER, S. R. (1978) Children's peer relations. Social and personality development. Michael E. Lamb (Ed). Halt, Rinehart and Winston, USA.

BARNETT, D. W. & ZUCKER, K. B. (1990) The personal and social assessment of children. Allyn and Bacon. Massachusetts.

BENTZEN, W. R. (1993) A Guide to observing and recording behaviour. Delmar Publishers Inc, New York.

CASEY, B. M. (1990) A planning and problem-solving preschool model: the methodology of being a good learner, Early Childhood Research Quarterly, 5, 53-67.

CRARY, E. (1984) Kids can cooperate. A practical guide to teaching problem solving. Parenting Press, Seattle.

DINÇER, Ç. & GUNEYSU, S. (1997) Examining the effects of Problem –solving training on the acquisition of interpersonal problem –solving skills by 5 -year-old children in Turkey. International Journal of Early Years Education, 5(1), 37-46.

DINWIDDIE, S. A. (1994) The Saga of Sally, Sammy and the Red Pen: facilitating children' s social problem solving. Young Children, 49 (5), 13-19, July.

GREENBERG, P. (1992) Promoting positive peer relations. Young Children, 47(4), 51-55, May.

GOFFIN, S. G. (1987) Cooperative behaviours: They need our support. Young Children, 42(2), 75-81, January.

HENNESSY, E. & MARTIN, S. (1992) Children and day care. Paul Chapman Publishing Ltd., London.

HOLLOWAY, S. D. & REICHHART, E. M. (1987) The relationship of day care quality to children's free play behaviour and social problem solving skills, 40 pages, ED 283613.

LAWHON, T. (1997) Encouraging friendships among children. Childhood Education, 73(4), 228-231, Summer.

PATTERSON, J. H. (1982) Sociodramatic play: A tool for improving children's interpersonal problem solving skills, Paper presented at the Annual Meeting of the American Educational Research Association, New York, March 19-23.

SHURE, M. B. & SPIVACK, G. (1982) Interpersonal problem-solving in young children: A cognitive approach to prevention, American Journal of Community Psychology, 10(3), 341-356.

SHURE, M. B. (1992a) An Interpersonal Cognitive Problem-Solving Program (ICPS): a mental health program for kindergarten and primary grade children. Champaign, IL, Research Press.

SHURE, M. B. (1992b) The PIPS test manual for 4 to 6 year old children. 2nd edn, Hahnemann University, Department of Mental Health Science, Philadelphia, USA.

SHURE, M. B. & DITLOW, P. M. (1994) How to think... not what to think: A cognitive approach to preventing high- risk behaviours. NHSA Journal, 13(3), 39-41.

TEGANO, D. W., SAWYERS, J. K., MORAN, J. D. (1989) Problem finding and solving in play. Childhood Education, 66(2), 92-97, Winter.

WITTMER, D. S. & HONIG, A. S. (1994) Encouraging positive social development in young children. Young Children, 49(5), 4-12.

**Table 1:** Distribution prepared according to the experimental and controlgroups based on the post test 1 and post test 2 points averaged according to number of solutions and categories provided with respect to problem situations relating to peers.

| | | | n | $\bar{x}$ | sd | t | p |
|---|---|---|---|---|---|---|---|
| Peer Solution | Post Test 1 n=74 | Experimental Group | 38 | 7.684 | 3.488 | 4.830 | p<0.05 significant |
| | | Control Group | 36 | 4.389 | 2.284 | | |
| | Post Test 2 (1 year later) n=58 | Experimental Group | 30 | 5.400 | 2.061 | 0.540 | p>0.05 not significant |
| | | Control Group | 28 | 5.071 | 2.567 | | |
| Peer Category | Post Test 1 | Experimental Group | 38 | 5.368 | 1.909 | 3.510 | p<0.05 significant |
| | | Control Group | 36 | 3.806 | 1.925 | | |
| | Post Test 2 | Experimental Group | 30 | 4.233 | 1.524 | 0.190 | p>0.05 not significant |
| | | Control Group | 28 | 4.143 | 2.103 | | |

**Table 2:** Distribution prepared according to post test 1 and post test 2 points averaged in experimental and control groups according to number of solutions and categories provided with respect to problem situations relating to peers.

| | | | n | $\bar{x}$ | sd | t | p |
|---|---|---|---|---|---|---|---|
| Peer Solution | Experimental Group | Post Test 1 | 30 | 7.367 | 3.011 | 3.680 | p<0.05 significant |
| | | Post Test 2 | | 5.400 | 2.061 | | |
| | Control Group | Post Test 1 | 28 | 4.143 | 2.121 | 1.890 | p>0.05 not significant |
| | | Post Test 2 | | 5.071 | 2.567 | | |
| Peer Category | Experimental Group | Post Test 1 | 30 | 5.200 | 1.627 | 2.510 | p<0.05 significant |
| | | Post Test 2 | | 4.233 | 1.524 | | |
| | Control Group | Post Test 1 | 28 | 3.607 | 1.792 | 1.300 | p>0.05 not significant |
| | | Post Test 2 | | 4.143 | 2.103 | | |

**Table 3:**Distribution prepared according to the experimental and control groups based on the post test 1 and post test 2 points averaged according to number of solutionsand categories provided with respect to problem situations relating to mothers.

| | | | n | $\bar{x}$ | sd | t | p |
|---|---|---|---|---|---|---|---|
| Mother Solution | Post Test 1 | Experimental Group | 38 | 5.553 | 2.152 | 3.000 | p<0.05 significant |
| | | Control Group | 36 | 4.167 | 1.813 | | |
| | Post Test 2 | Experimental Group | 30 | 5.200 | 2.107 | 1.150 | p>0.05 not significant |
| | | Control Group | 28 | 4.571 | 2.044 | | |
| Mother Category | Post Test 1 | Experimental Group | 38 | 4.237 | 1.895 | 2.600 | p<0.05 significant |
| | | Control Group | 36 | 3.194 | 1.546 | | |
| | Post Test 2 | Experimental Group | 30 | 4.267 | 1.799 | 1.730 | p>0.05 not significant |
| | | Control Group | 28 | 3500 | 1.575 | | |

**Table 4:** Distribution prepared according to post test 1 and post test 2 points averaged in experimental and control groups according to number of solutions and categories provided with respect to problem situations relating to mothers.

| | | | n | $\bar{x}$ | sd | t | p |
|---|---|---|---|---|---|---|---|
| Mother Solution | Experimental Group | Post Test 1 | 30 | 5.367 | 2.205 | 0.370 | p>0.05 not significant |
| | | Post Test 2 | | 5.200 | 2.107 | | |
| | Control Group | Post Test 1 | 28 | 3.929 | 1.884 | 2.240 | p<0.05 significant |
| | | Post Test 2 | | 4.571 | 2.044 | | |
| Mother Category | Experimental Group | Post Test 1 | 30 | 4.167 | 1.895 | 0.270 | p>0.05 not significant |
| | | Post Test 2 | | 4.267 | 1.799 | | |
| | Control Group | Post Test 1 | 28 | 2.821 | 1.389 | 2.880 | p<0.05 significant |
| | | Post Test 2 | | 3.500 | 1.575 | | |

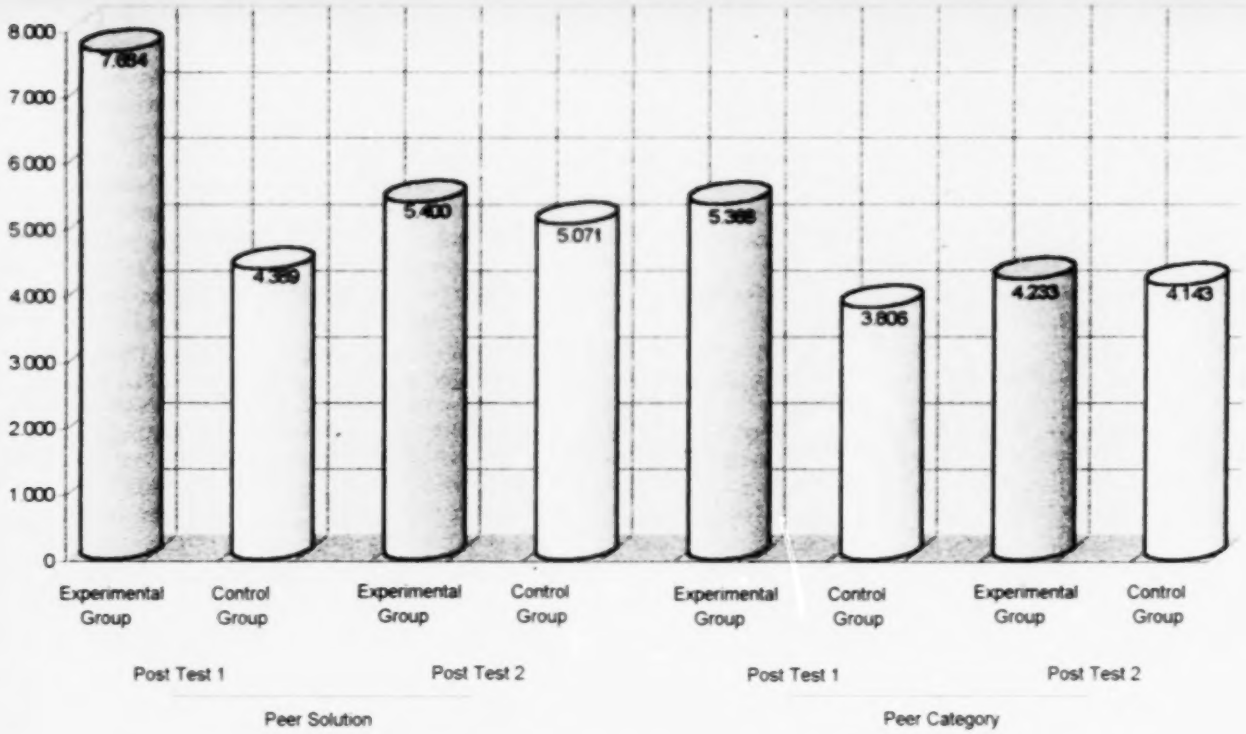


Figure 1. Graphical examination of distribution prepared according to the experimental and control groups based on the post test 1 and post test 2 points averaged according to number of solutions and categories provided with respect to problem situations relating to peers.

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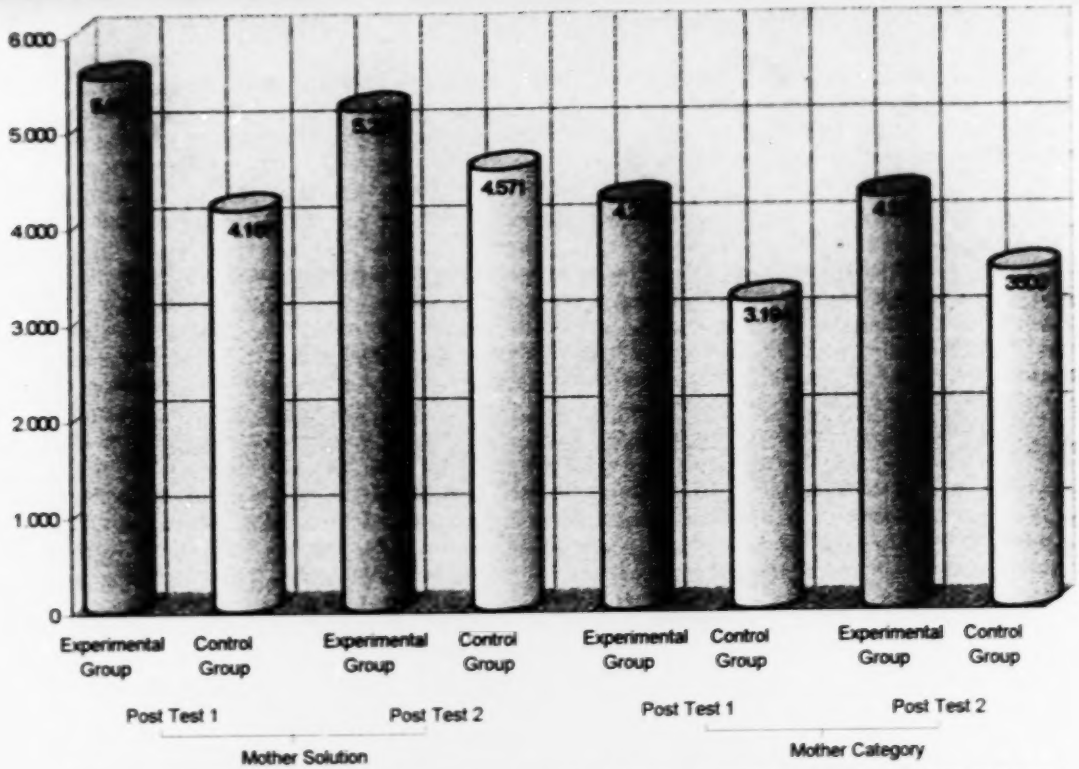


Figure 2. Graphical examination of distribution prepared according to the experimental and control groups based on the post test 1 and post test 2 points averaged according to number of solutions and categories provided with respect to problem situations relating to mothers.



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